National Renewable Energy Laboratory
Solicitation for Letters of Interest (LOI) No. RAT-2-32616

"NREL/DOE DISTRIBUTED POWER PROGRAM-
DISTRIBUTION AND INTERCONNECTION RESEARCH AND DEVELOPMENT"

REQUEST FOR LETTERS OF INTEREST

READ THIS DOCUMENT CAREFULLY

This solicitation is being conducted under the streamlined procedures for competitive Letters of Interest established by the National Renewable Energy Laboratory (NREL). NREL will select an LOI for potential subcontract award based on the following.

- All requirements being met
- The best combination of:
  - Technical factors (based on qualitative merit criteria) and
  - Evaluated cost

Issue Date: 07/12/02: Due Date: 08/27/02: Time Due: 4:00 P.M. Mountain Time

Technical Questions must be received in writing no later than 07/30/02

1. Solicitation Type: Best Value Letters of Interest

Submit offers to and request information from the NREL RFP Contact below

2. NREL LOI Contact

Submit LOI to and request information from the NREL LOI Contact

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National Renewable Energy Laboratory
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Golden, CO 80401-3393
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Electronic (PDF) copies of forms, sample subcontract, and appendices can be found at:
http://www.nrel.gov/contracts/rfp_related_docs/index.html

3. Background

The goals of the National Energy Policy are to modernize conservation and the energy infrastructure, increase energy supplies, accelerate protection and improvement of the environment and increase energy security. Distributed Energy Resources (DER) will play a key role in maintaining and enhancing the reliability, power quality, security and environmental friendliness of the U.S. electric power system. This essential role is described in the Department of Energy (DOE) Strategic Plan for Distributed Energy Resources.[1] In this Plan, the overall vision for DER is that by 2020 the U.S. will have the cleanest and most efficient and reliable energy system in the world, which will be maximized with the use of affordable distributed energy resources. The vision is for all customers - industrial, commercial, institutional, and residential – to be able to choose from a diverse array of ultra-high efficiency, ultra-low emission, fuel flexible, and cost-competitive DER products and services. These products and services will be easily interconnected with the nation's infrastructure for electricity, natural gas, and renewable energy resources. They will operate in an optimized manner to maximize value to both users and energy suppliers while protecting the environment.

The Strategic Plan also states that the DER Mission is to lead the national effort to, among other things, document the energy, economics, and environmental benefits of the expanding use of DER. Further, the Mission is to implement deployment strategies, including national and international standards to address infrastructure, energy delivery, institutional, and regulatory needs.

The Distributed Power Program (DPP)[2] activities are designed and directed toward achieving the full value of distributed energy resources for a secure reliable electricity system with customer choice.

4. Objectives

Achieving the economic and environmental benefits projected for DER will require removing the technical and regulatory barriers to utilizing these resources. The key objectives of the program are: establishing national interconnection standards; reducing the cost and time required for interconnection; developing intelligent interconnection technology that facilitates the DER roles for greater energy security, enhanced reliability and increased productivity; and an improved regulatory and institutional environment. The Distributed Power Program's objective with this Letters of Interest (LOI) Solicitation is to address specific issues. Letters of Interest addressing these issues are requested that will demonstrably improve DER system integration, provide technical, policy, or operational advancements in interconnection for DER, and work to remove regulatory and institutional barriers. LOIs are sought for specific solutions through applied engineering research, analysis, and testing that address interconnection, interface, operations, information sharing, monitoring, and control of distributed energy resources with electric power systems.

[1] *DOE Strategic Plan for Distributed Energy Resources, September 2000*

[2] The name of the DPP will change to Distribution and Interconnection R & D in fiscal year 2003.

The Program encourages Responders to explore opportunities to team with others to capitalize on greater opportunities resulting from a broader technology experience and funding base.

To accomplish these objectives, this LOI Solicitation identifies four categories. Each is described in Section 5. The Distributed Power Program has work already in progress in some of these categories. To avoid duplication, potential responders should review that work. Public information regarding prior and current activities is available on the DOE Distributed Power Program website, http://www.eren.doe.gov/distributedpower/.

5. Scope of interest

The Distributed Power Program at NREL is soliciting an LOI from individual U.S. companies and/or U.S. teams to address a range of activities related to interconnecting and integrating distributed energy resources. These activities are organized into four categories as follows:

A. Advanced Universal Interconnection Technology;
B. Field Testing of Distributed Power Technology for Interconnection Standards and Electrical Power Systems Configurations;
C. Standards for Distributed Energy Resources System Integration, Interconnection and Operation with Electric Power Systems; and
D. Analysis and Research on Alternative Rates and Tariffs for Distributed Energy Resources.

Responders are advised that the activity descriptions under the four categories are neither all encompassing, nor do they rigidly define the targeted activities sought through this Solicitation. The activity descriptions and the subsequent examples are only provided to stimulate expanded ideas for proposed letters of interest. Responders are encouraged to provide other innovative and logical approaches.

Each of the four categories is described in the sections below. A separate submission must be provided for each unique LOI being submitted. The same entity or team may submit unique LOIs in one or more categories and/or multiple unique LOIs in a single category. More guidance for preparing the LOIs is included in Section 6.

5.1 Category A: Advanced Universal Interconnection Technology

LOIs are requested in this category to develop an advanced universal modular interconnection technology that can provide cross-DER platform capability and increased functionality for load management and grid support. The focus of this category is primarily technologies for the 1 kW-3 MW range. Standardization of electrical interfaces, connections, and communications requirements for the system interface will likely be needed to achieve a truly universal plug-and-play environment for the interconnection. Standardization will also support wide deployment of interconnection systems that provide highly multi-functional interfaces that optimally control generation, storage, and load, while providing

ancillary services to the utility grid. The LOI should propose a technology incorporating testable protective functions and be capable of meeting the requirements of the Institute of Electrical & Electronics Engineers (IEEE) P1547, which is now in draft form. Approaches with modular system architectures are preferred. LOIs may address technology for a subset of the capacity range stated above, or propose a scalable technology that would result in a family of products to cover the full range. Interconnection technology developed under this solicitation will be validated for performance at the NREL DER Test Facility.

While all LOI responses must include a clear statement of the rationale for the project there are additional requirements in this category. LOIs must include a discussion of the estimated costs of the proposed interconnection system, and an assessment of how the proposed equipment will improve the interconnection, system integration and implementation of DER. The LOI must define the metrics by which success will be measured and how the proposed effort will contribute to achieving the Program's near and longer-term objectives.

- **Inverter-Based Interconnection Technology**
  For inverter-based interconnection technology the immediate objectives are to provide cross-DER-platform capability (i.e. should work with solar, wind, micro-turbines, fuel cells, reciprocating engines, batteries, flywheels, etc.), increased functionality for load management and grid support, with at least a 20% cost reduction while maintaining the current 3- to 5-year mean time between failures. To the maximum extent possible, the cross-platform capability and increased functionality should be achieved through firmware or software.

- **Non-Inverter-Based Interconnection Technology**
  Discrete components such as switchgear, protective relays, and communications interfaces, account for a significant proportion of the current cost of traditional non-inverter interconnection equipment. The objective is to move to a microprocessor-based approach employing power electronics, programmable logic devices and firmware/software to integrate the existing discrete components into a single hardware platform. A high degree of integration is desired, as well as demonstrated cost reductions of 20% or more compared with current commercial products, especially for use with DER sizes of 200 kW or less; customization for specific applications through firmware/software; and the capability to enable load management, grid support, and interact with command and control systems.

- **Advanced Modular Universal Interconnection Technology**
  A program objective is to develop a single modular universal interconnection technology applicable to both inverter and non-inverter based applications. The intent is to establish a core technology, with large markets creating an incentive for industry competition and innovation. The modularity in both hardware and firmware/software would provide common elements for both basic and more complex interconnections. The approach would provide cost-

effective modules for basic interconnection systems with minimal functionality (e.g., one generator connected with local load and satisfying interconnection requirements for parallel operation with the utility electric power system). It would also provide a simple and cost-effective means for expanding capabilities to meet the requirements of more demanding applications, for example: connection of multiple DER, such as a photovoltaic array, a fly wheel and a fuel cell, to the load; servicing both AC and DC loads; participation in electricity markets, including dispatch by an aggregator, a utility or an ISO; providing ancillary services to the grid; interfacing with enterprise management systems. Technology implementations would be highly integrated, microprocessor-based, and maximize the extent to which customization for specific applications is accomplished through firmware/software. LOIs could address feasibility and concept development, topologies, module definitions and standardization of module interfaces, and engineering design.

- **Advanced Autonomous and Semi-Autonomous Interconnection Technology**
  LOIs for research supporting the development of artificial intelligence approaches to autonomous or semi-autonomous interconnection technology are desired.

5.2 Category B: Field Testing of Distributed Power Technologies for Interconnection Standards and Electrical Power Systems Configurations

The focus for this category includes field testing to complete, validate, and implement a national interconnection standard for DER. Responders are encouraged to provide innovative and logical approaches to justify and support their responses. Any products or procedures (including models) developed under this LOI will be tested or verified by NREL either at the manufacturer/developer facility, field installation, or at the NREL DER test facility. Tests developed in this area would support both IEEE P1547 and IEEE P1589 standards development.

- **Penetration of Distributed Energy Resources on Electric Systems**
  Submittals in this area should focus on testing that determines and resolves issues associated with large penetration of distributed energy resources (up to 50%) on an electrical system. Part of this work could include the development and validation of models that emulate the systems being tested, in order to better understand the benefits and challenges posed by the increased penetration of DER. This work could also discuss issues that pertain to the scalability of testing at different voltage and penetration levels.

- **Distributed Energy Resources on Secondary and Spot Networks**
  Submittals in this area should focus on developing and validating tests that would determine the technical basis and support the performance and safety of operating distributed generation and storage equipment on secondary and spot networks, and identify approaches that would resolve operational issues.

- **Impacts of Distributed Energy Resources and Electrical Power Systems on Each Other**
  Submittals in this area should focus on tests determining the impacts of DER on the electric grid, such as the impact of electrical grid disturbances (faults, sags, swells) on the distributed generation system, and vice versa.

- **Testability of Distributed Energy Resources (Type Testing vs. Field Testing)**
  Submittals in this area should focus on tests determining the applicability and equivalency of conducting tests defined in IEEE P1547 and P1589 in the field versus in the laboratory. These may include, but should not be limited to, tests for voltage and frequency disturbances, power quality, islanding, synchronization, etc.

- **Islanding of Distributed Energy Resources**
  Submittals in this area would focus on designing, developing and validating tests that determine island conditions for the range of DER technologies and different electric power systems.

5.3 Category C: Standards for Distributed Energy Resources System Integration, Interconnection and Operation with Electric Power Systems

The LOIs sought for this category should support the development and completion of new standards and/or revise existing ones. The activities in this category could provide supporting rationale, technical basis, pro and con impacts, validation, and recommended resolutions of key issues for standards development. Examples for approaching these activities could include: documented case studies, modeling or simulation results, and developing simple tools.

The bulleted items that follow are examples of the kinds of activities and standards issues in this category.

- IEEE P1547 future revisions: Examples of issues having arisen in past P1547 development follow: type testing vs. field testing, i.e., testability on site such as micro-processor based to do periodic field tests automatically, etc.; secondary grid and spot networks such as circuit topologies, issues, and recommendations for interconnection involving DER and the electric power systems; grounding/faults; DER penetration/aggregation; and islanding;

- IEEE P1589 Draft Standard for Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems;

- IEEE P1608 Draft Application Guide for IEEE Std 1547 for Interconnecting Distributed Resources With Electric Power Systems;

- Proposed IEEE project P1614 Guide for Monitoring, Information Exchange, and Control for Distributed Resources;

- Islanding;

- Network Specifications and Applications with Distributed Resources; and

- Conduct the assessment, evaluation and analysis necessary to better define the expected benefits of certain interconnection approaches, overall interconnection standards, and information requirements to speed the overall impact of the program in facilitating the application of distributed energy resources.

5.4 Category D: Analysis and Research for Alternative Rates and Tariffs for Distributed Energy Resources

Developing reasonable, fair and equitable tariff approaches for the integration of distributed energy resources remains a major challenge to traditional regulatory approaches. LOIs are sought in this category to address activities to examine alternatives for rates and tariffs for DER. These alternatives are sought in order to provide policy makers, regulators and other stakeholders with sound alternatives that could speed the commercial adoption of DER for the wide range of current and potential applications.

LOIs in this category could propose to collaboratively develop a model tariff applicable to distributed energy resources. Any LOIs proposing such a collaborative effort should include involvement of state utility and environmental regulatory commissions and should demonstrate an understanding of the relevant technical and non-technical aspects of distribution systems and tariffs.

LOIs may examine bases for solution of specific DER issues related to rates and tariff structures such as developing approaches for reasonable and equitable standby or back up tariffs, the effect of scheduled and unscheduled maintenance on potential demand charges, compensation for benefits to the distribution system provided by DER, and/or treatment of stranded assets.

6. Qualification requirements

The following criteria are the baseline requirements that must be met by each Letter of Interest submitted in response to this Solicitation. NREL will eliminate, at its discretion, any proposal that does not meet the criteria below. **Responders failing to meet these criteria will not be evaluated for an award and will be considered non-responsive to this LOI solicitation.**

- Responses will be accepted only if submitted by a U.S. organization (defined as an organization incorporated in the U.S.) or submitted by a team led by a U.S. organization. Responders may be U.S. industry, consultants, colleges and universities or other U.S. business entities. Industry is encouraged to team with other programs, universities or colleges. Responders may submit more than one unique LOI. The same responders may be members of other teams in additional responses. A member of a team may be part of different teams in separate LOIs.

- A separate submission must be provided for each unique LOI being submitted. The same entity or team may submit unique LOIs in one or more categories and/or multiple unique LOIs in a single category.

- Each LOI is required to stand alone, e.g., it shall not be contingent upon acceptance of another LOI, or contingent upon winning any other award in any other program.

- The cost estimate for the LOI must include monthly, annual, draft final, and final reports and up to four (4) program meetings per year.

- Any DER system interconnection testing shall be coordinated with, or conducted at, NREL's DER test facility or at the Nevada Test Site to verify functional operation.

- All LOI responses must include a clear statement of the technical objectives for the work and the impact of the proposed work on reducing the cost of interconnection or system integration, supporting the development of interconnection standard, and/or enhancing the value of distributed energy resources. The LOI must define the metrics by which success will be measured and how the proposed effort will contribute to achieving the Program's near and longer-term goals.

7. Potential subcontract award and available project funding

It is the intent of NREL to make up to fifteen (15) subcontract awards under this solicitation. This number of awards may vary due to the responses received and the availability of DOE funds.

- Cost sharing is REQUIRED for each year (with the exception of Category D) and varies by category. The cost sharing and the anticipated funding limits are described below. The responder's proposed cost share ratio must meet or exceed the required ratio and the minimum ratio must be maintained in each year. This means that NREL will not pay a larger cost share in one year, to be offset by a smaller cost share in a different year. In-kind (other than money) cost sharing is acceptable. This means the cost share may be in the form of labor and/or equipment.

  - Category A: A minimum 50% cost share by the Responder is required. The NREL cost share should not exceed $300,000 per year, up to a maximum of 3 years.
  - Category B: A minimum 60% cost share by the Responder is required. The NREL cost share should not exceed $500,000 per year up to a maximum of 3 years.
  - Category C: A minimum 50% cost share by the Responder is required. The NREL cost share should not exceed $200,000 per year up to a maximum of 3 years.
  - Category D: No cost share is required.

There are no NREL/DOE capital equipment funds available under this solicitation. Capital equipment is defined as equipment with a unit value of $5,000 or more, including applicable shipping and installation charges, and having a life expectancy of two years or more.

NREL reserves the right to make any number of awards or not to make any awards under this solicitation document. Subject to the availability of funds, multiple Cost-type awards are anticipated. The period of performance for each award will be one base year (12 months) with up to two option years or phases, for a total of a maximum of three years.

NREL may fund the Base Year and the Option years incrementally. This means that funding may be provided incrementally throughout a 12-month period. Annual reviews will occur at the end of the Base Year and any subsequent Option year that is funded. The decision to fund a subsequent Option year will be determined annually prior to the end of the preceding 12-month period and is dependent on the results of the reviews and available NREL/DOE funding.

8. Competitive solicited Letters of Interest using Best Value Selection

This solicitation shall be conducted using Best Value Selection that results in the selection of LOIs for potential subcontract award that is most advantageous to NREL based on the best value combination of (a) evaluated qualitative merit and (b) evaluated cost of the LOIs submitted.

Best Value Selection is based on the premise that, if all LOIs are of approximately equal qualitative merit, award will be made to the LOIs with the lowest evaluated cost. However, NREL will consider selecting an LOI with a higher evaluated cost if the offer

demonstrates the difference in cost is commensurate with the higher qualitative merit. Conversely, NREL will consider selecting an LOI with a lower evaluated qualitative merit if the cost differential between it and other LOIs warrant doing so.

9. Qualitative Merit Criteria for Best Value Selection

The scope of interest (see item 5) and the qualification requirements (see item 6) in this solicitation serves as NREL's baseline requirements that must be met by each LOI.

The qualitative merit criteria (see Sections 9.1, 9.2, 9.3) establish what NREL considers the technical factors valuable in an LOI. These qualitative merit criteria are performance-based and permit selection of a higher priced LOI that provides higher qualitative merit.

The following qualitative merit criteria will be used by evaluators to determine the technical value of the offer in meeting the objectives of the solicitation.

Each qualitative merit criteria and its assigned weight are provided below.

9.1 Technical Approach, Planned Results, and Deliverables (50%)

This criterion includes the following considerations:

- Is the technical plan (objective, approach, results, deliverables, etc.) clearly stated, achievable and technically reasonable?
- What is the potential of the proposed planned results and deliverables (e.g., technology/system/end product/activity) to achieve the objectives defined for this solicitation?
- As demonstrated in the technical plan, what is the likelihood that the problem addressed in this response will be solved?
- What is the expected significance and quality of both the undertaking, and the success of this effort, including its planned results and deliverables?

9.2 Experience (25%)

This criterion includes the following considerations:

- What is the experience and record of success of the Responder(s) (list of past projects including names and phone numbers of contacts)?
- What experience does the Responder(s) have in the particular category (Categories A through D)?
- What experience does the Responder(s) have in the proposed topic(s) in their LOI?

9.3 Capability (25%)

This criterion includes the following considerations:

- What is the capability of the Responder (supported by resumes of key personnel)?
- Does the Responder have the technical knowledge to accomplish the proposed objectives?
- Are the company's resources adequate to implement the proposed project?
- If equipment is needed, is it currently available by the Responder?

10. Additional Factors for Evaluation

In addition to the qualitative merit criteria above, each LOI will be evaluated against the following evaluation factors to determine the competitive range and final negotiation rank order. These factors are not weighted.

10.1 Environment, Safety, and Health (ES&H) Factors

This factor includes the following considerations:

- Are considerations for environmental, safety, and health problems adequately described and addressed, including complete identification and proposed mitigating actions?
- Are plans included that reduce waste streams or propose alternatives to reduce use of toxic/hazardous substances?

10.2 Strategic and Program Policy Factors

This factor includes the following considerations:

- Relative mix of LOIs in relation to the proposed activities received in this solicitation; and, in relation to the ongoing DP Program subcontracts and activities;
- Relative mix of LOIs in relation to the DP Program Plan near-term and long-term strategies;
- Relative mix of LOIs, in relation to total funding available, and, in relation to relative mix of other LOIs requested funding; and
- Industry is encouraged to team with others.

11. Cost Evaluation for Best Value Selection

After evaluation of the qualitative merit criteria (and additional factors for evaluation), the following cost evaluation will be used to determine the best value of the LOI in meeting the objectives of the solicitation.

11.1 Cost

This factor includes the following considerations:

- Reasonableness of the total proposed cost and the individual cost elements that comprise the total cost;
- Responder's demonstrated understanding of the project based upon the proposed cost to perform the work;
- Responder's demonstrated understanding of the risk involved based on the proposed cost;
- Reasonableness of the proposed cost in relation to the magnitude of the work to be performed; and
- Responder's level of cost sharing (higher level of cost sharing will be more highly evaluated.

The combined qualitative merit value will be considered substantially more important than the cost.

12. Evaluation process

NREL will evaluate LOIs in two general steps:

Step One—Initial Evaluation
An initial evaluation will be performed to determine if all required information has been provided for an acceptable LOI. Responders may be contacted only for clarification purposes during the initial evaluation. Responders shall be notified if their LOI is determined not acceptable and the reasons for rejection will be provided. Unacceptable LOIs will be excluded from further consideration.

Step Two—Discussion and Selection
All acceptable LOIs will be evaluated against the scope of interest and the qualification requirements; the qualitative merit criteria, and additional factors listed above. Based on this evaluation, NREL will negotiate an acceptable Statement of Work based on a responder's LOIs and will request a cost proposal for the project.

13. LOI Preparation Information

The LOI shall be organized in the sections as listed below. The total LOI shall not exceed 15 pages (resumes not included in page count). The LOI must be submitted as an original along with 9 copies. The LOI must include as a minimum the following information:

1) **Title page**: including:

i. LOI Solicitation Title and NREL LOI Number;
ii. Category designation as being under Category A, B, C, or D;
iii. Title of your proposal (title should be succinct and capture the essence of your LOI);
iv. Name of the submitting organization;
v. Name of the authorized submitter with postal address, telephone and fax number, and e-mail address;
vi. Name(s) of the principal investigator(s) with postal address, telephone and fax number, and e-mail address;

2) **Targeted Tasks, Deliverables and Significant Milestones**:

This section MUST include a clear statement of the rationale for the project. The section must define the metrics by which success will be measured and how the proposed effort will contribute to achieving the Program's near and longer-term goals. This section must also include a proposed schedule for the major tasks. Deliverables and any significant milestones should relate to the specific tasks. Monthly and annual reports, and draft and final reports, are also required.

Responses to Category A must include the following:

i) **For Category A, Advanced Universal Interconnection Technology**, LOIs MUST include a discussion of the estimated costs of the interconnection system and an assessment of how the proposed equipment will speed the interconnection, system integration and implementation of distributed energy resources.

The following information must also be submitted, but it is not included in the 15-page limit:

3) **Budgetary Documentation**

All LOIs must include supporting documentation to indicate if they have DCAA audited indirect rates, or other government contracts and negotiated rates.

4) **Budget Estimate**

All LOIs must include a budget estimate in an original and 9 copies. Each responder's budget estimate should include totals for each year and the total of all years. Each responder's budget and delivery terms must be valid for 190 days from the date of LOI.

5) **Representations and Certifications**

All LOIs must include a completed Representations and Certifications form in an original, including signatures, and 9 copies.

This solicitation DOES NOT allow the submittal of facsimile or electronic proposals.

This solicitation DOES NOT commit NREL to pay costs incurred in the preparation and submission of a response to this LOI Solicitation.

LOIs are to be formatted as follows:

i) Fifteen (15) pages for the LOI, excluding title page and resumes
ii) A page is defined as one side of an 81/2 x 11 sheet of paper
iii) 12-point font
iv) 1.5 lines for minimum line spacing
v) Maintain at least 1-inch margins on all sides
vi) Copies may be either single or double sided

14. Solicitation Provisions—Full Text Provided

a. Late submissions, modifications, and withdrawals of LOIs

LOIs, or modifications to them, received from qualified organizations after the latest date specified for receipt may be considered if received prior to selection, and NREL determines that there is a potential budget, technical, or other advantage, as compared to the other LOIs received. However, depending on the circumstances surrounding the late submission or modification, NREL may consider a late LOI to be an indication of the respondent's performance capabilities, resulting in downgrading of the LOI by NREL evaluators in the technical evaluation process. An LOI may be withdrawn by written notice or telegram (including mailgram) received at any time before selection. LOIs may be withdrawn in person by a responder or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the LOI before selection.

b. Restrictions on disclosure and use of data

Responders who include in their LOIs data that they do not want disclosed to the public for any purpose or used by the government or NREL, except for evaluation purposes shall—

1. Mark the title page with the following legend:
"This LOI includes data that shall not be disclosed outside the government or NREL and shall not be used or disclosed—in whole or in part—for any purpose other than to evaluate this LOI. If, however, a subcontract is awarded to this responder as a result of—or in connection with—the submission of this data, the government or NREL shall have the right to use or disclose the data to the extent provided in the resulting subcontract. This restriction does not limit the government or NREL's right to use information contained in this data if obtained from another source without restriction. The data subject to this restriction are contained on pages [insert page and line numbers or other identification of pages] of this LOI"; and

2. Mark each page of data it wishes to restrict with the following legend:
"Use or disclosure of data contained on this page is subject to the restriction on the title page of this LOI."

c. Notice of right to receive patent waiver (derived from DEAR 952.227-84) and technical data requirements

Responders (and their prospective lower-tier subcontractors) in accordance with applicable statutes and Department of Energy Acquisition Regulations, (derived from DEAR 952.227-84) have the right to request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of the subcontract that may be awarded as a result of this solicitation, in advance of or within thirty (30) days after the effective date of subcontracting. Even where such advance waiver is not requested or the request is denied, the subcontractor will have a continuing right during the subcontract to request a waiver of the rights of the United States in identified, individual inventions.

Domestic small business firms, educational institutions, and domestic nonprofit organizations normally will receive the Patent rights clause—retention by the subcontractor—which permits the responder to retain title to subject inventions, except in subcontracts involving exceptional circumstances or intelligence activities. Therefore, domestic small business firms, educational institutions, and domestic nonprofit organizations normally need not request a waiver.

If a responder's proposal includes a lower-tier subcontract to another organization, that lower-tier organization's business type will determine the applicable intellectual property provisions that will apply to the lower-tier subcontract. Note that a lower-tier subcontractor may apply for a patent waiver under the same conditions as the responder.

Under a research, development, and demonstration project, the Department of Energy and NREL are unable to ascertain, prior to receipt of LOIs, subsequent proposals, or performance of the project, their actual needs for technical data. It is believed that the requirements contained herein are the basic needs of the Department of Energy and NREL. However, if the responder indicates in its LOI or subsequent proposal that proprietary data will be used or withheld under its proposed effort, the government and NREL reserve the right to negotiate appropriate rights to the proprietary data. The appropriate rights may include "Limited Rights in Proprietary Data" and/or "Subcontractor Licensing."

d. Disclaimer

NEITHER THE UNITED STATES; NOR THE DEPARTMENT OF ENERGY; NOR MIDWEST RESEARCH INSTITUTE, NATIONAL RENEWABLE ENERGY LABORATORY DIVISION; NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR THEIR EMPLOYEES MAKE ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUME ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSE OF ANY OF THE TECHNICAL INFORMATION OR DATA ATTACHED OR OTHERWISE PROVIDED HEREIN AS REFERENCE MATERIAL.

e. Solicitation disputes

The General Accounting Office and the Department of Energy do not accept or rule on disputes for solicitations for Letters of Interest issued by Management and Operating Contractors for the Department of Energy (operators of Department of Energy National Laboratories). Should a responder have any concerns regarding the NREL solicitation process or selection determination, the responder may contact Marty Noland, Advocate for Commercial Practices, at (303) 384-7550. NREL will address each concern received from a responder on an individual basis.

f. (Lower-Tier) Small Business Subcontracting Plan (derived from FAR 52.219-9)

The following requirement does not apply to small business offerors.

The selected responders to this solicitation shall include in their proposals a lower-tier subcontracting plan that separately addresses lower-tier subcontracting with small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual subcontract plan, the plan must separately address lower-tier subcontracting with small business, small disadvantaged business, women-owned small business concerns, veteran-owned business, and Hubzones, with a separate part for the basic subcontract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant subcontract. The lower-tier subcontracting plan shall be negotiated within the time specified by the NREL Subcontract Administrator. Failure to submit and negotiate a lower-tier subcontracting plan shall make the offeror ineligible for award of a subcontract (see NREL website).

15. Solicitation Provisions—Incorporated by Reference

This solicitation incorporates one or more solicitation provisions by reference with the same force and effect as if they were given in full text. The following documents can be downloaded from the NREL **general access** website at http://www.nrel.gov/contracts/rfps/ or the NREL LOI Contact (see item 2) will make full text available upon request.

- NREL Representations and Certifications for Subcontracts
- NREL Cost Proposal Form
- NREL Small Business (Lower-tier) Subcontracting Plan Requirements (Does not apply to small businesses)

16. NAICS Code and Small Business Size Standard

a. The North American Industry Classification System (NAICS) code [formerly standard industrial classification (SIC)] for this solicitation is 54171.

b. The small business size standard for 541710 is 500 or fewer employees.